

ABSTRACT

A transmission screen is capable of preventing the reduction of contrast in images due to external light such as emitted by internal lighting fixtures. The transmission screen includes a Fresnel lens sheet

- 5 having a front surface facing the viewer and provided with Fresnel lens elements, and a shading sheet 13 placed contiguously with the front surface of the Fresnel lens sheet. The shading sheet 13 is provided with shading elements 22 for absorbing external light fallen on the front surface of the shading sheet 13 and reflected in a total reflection mode
- 10 by the back surface of the Fresnel lens sheet facing a projection light source toward the viewer. Preferably, the shading elements 22 transmit at least external light fallen on the shading sheet at an incident angle  $\theta$  satisfying a condition expressed by:  $\theta < 24 + 0.018 \times F$ , where  $\theta$  is incident angle of external light that falls on the shading sheet, and  $F$  is
- 15 the focal length of the Fresnel lens elements in millimeter.